REMARKS

Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the following remarks.

Claims 1, 2, and 12 have been amended and claims 3-11 have been cancelled. New claims 13 and 14 have been introduced. No new matter has been introduced into the application by the instant amendments. Support for the amendments may be found throughout the specification as filed and in the originally presented claims. Applicants expressly preserve the right to pursue non-elected or cancelled subject matter in this or a subsequently filed co-pending application.

Claims 1, 2, and 8-12 were rejected under 35 U.S.C. §112, second paragraph as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

The claims, as amended, are fully compliant with the requirements of 35 U.S.C. §112, including the requirements of §112, second paragraph. Applicants respectfully request withdrawal of the rejection and reconsideration of the claims.

Claims 1, 8, and 9 were rejected under 35 U.S.C. §102(e) as being allegedly anticipated by Ames.

The rejection is traversed.

Claim 1, as amended, provides screening assays for new compounds capable of binding to SLC-1 which assays utilize MCH derivatives, particularly a ^{125}I labeled derivative of MCH(4-19), e.g., [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^4}-MCH(4-19) which was prepared using the Bolton-Hunter (BH) reagent.

In contrast, Ames recites variants of SLC-1 prepared by splicing. Ames neither discloses nor suggests MCH derivatives and more particularly does not disclose or suggest iodo derivatives of MCH (such as radiotopically labeled iodo derivatives). Moreover Ames neither discloses nor suggests the use of iodized MCH derivatives such as [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^4}-MCH(4-19) in methods of screening for compounds capable of binding to SLC-1.

Thus claim 1 is patentable over Ames. New claim 13 depends from claim 1 and is therefore also patentable over Ames. Applicants respectfully request withdrawal of the rejection and reconsideration of the claims.

Claims 1 and 8 were rejected under 35 U.S.C. §102(e) as being allegedly anticipated by Salon.

The rejection is traversed.

Claim 1 as amended, provides screening assays for new compounds capable of binding to SLC-1 which assays utilize MCH derivatives, particularly a ^{125}I labeled derivative of MCH(4-19), e.g., [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^4}-MCH(4-19) which was prepared suing the Bolton-Hunter (BH) reagent.

In contrast, Salon recites an MCH receptor, which has an amino acid sequence with 99.8% homology to that of SLC-1. However, Salon neither discloses nor suggests any MCH derivatives and more particularly does not disclose or suggest iodinated MCH derivatives such as [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^4}-MCH(4-19). Salon neither discloses nor suggests MCH derivatives and more particularly does not disclose or suggest iodo

derivatives of MCH (such as [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^{4}}-MCH(4-19)) or screening assays using same.

Thus claim 1 is patentable over Salon. New claim 13 depends from claim 1 and is therefore also patentable over Salon. Applicants respectfully request withdrawal of the rejection and reconsideration of the claims.

Claim 2 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Ames.

Claim 2 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Salon.

Claim 9 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Salon as applied to claims 1 and 8, and further in view of Maratos-Flier.

Claims 10 and 11 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Ames as applied to claims 1, 2, 8 and 9, and further in view of Bolton.

Claim 12 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Maratos-Flier as applied to claim 9, and further in view of Bolton.

Each of the rejections is traversed.

No combination of Ames, Salon, Maratos-Flier and/or Bolton teach or suggest the use of iodinated MCH derivative, particularly radiolabelled [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^{4}}-MCH(4-19) in assays to screen for other compounds capable of binding to SLC-1. Moreover, no combination of the cited documents provide any motivation to

prepare [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^{4}}-MCH(4-19) for any purpose or to prepare a kit comprising a buffer and [^{125}I]-{N-(3-(4-hydroxy-3-iodophenyl)propionyl)-Met^{4}}-MCH(4-19).

It is generally known to those of ordinary skill in the art that the physiological activity of MCH is destroyed by iodinization such that iodized MCH is not suitable for use in binding assays. Consequently, tritiated MCH derivatives have been prepared and used in binding assays (See, *J. Receptor Signal Transduct. Res.*, Vol 15, pp. 487-502 (1995)).

The specification provides data showing that various iodized MCH derivatives, prepared using the BH reagent, have reduced binding affinity for SLC-1 when compared to MCH. Data was obtained using the GTPγS binding assay. See Examples 22 and 23 and Figures 8 and 9 of the instant specification. When MCH was labeled with iodide, the activity of the iodized derivative was reduced by 3.5 fold compared to unlabeled MCH. Similarly, iodized MCH derivatives {MCH(2-19), MCH(3-19), and MCH(5-19)} each possess reduced agonist activity compared to MCH.

In contrast, iodized MCH(4-19) possesses increased agonist activity than MCH itself. This result is shown in Example 22 and Figure 8 of the present invention.

Applicants have further discovered that iodized BH-MCH(4-19) specifically binds to SLC-1 (see Example 23 and Figure 9 of the present invention).

Thus, the superior affinity data for BH-MCH(4-19) compared to other MCH derivatives and MCH itself would not have been expected to one of ordinary skill in the art based on any combination of the documents relied upon in formulating the outstanding §103 rejections.

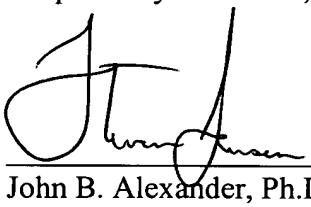
Claims 2 and 12 are patentable over any combination of the cited documents. Claim 14 depends from claim 2 and is therefore also patentable over any combination of the cited documents.

Applicants request reconsideration of the claims and allowance of the application.

Although it is not believed that any additional fees are needed to consider this submission, the Examiner is hereby authorized to charge our deposit account no. 04-1105 should any fee be deemed necessary.

Early consideration and allowance of the application are earnestly solicited.

Respectfully submitted,



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